



# Transit Performance Measurement in California

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**California MAP-21 Workshop**

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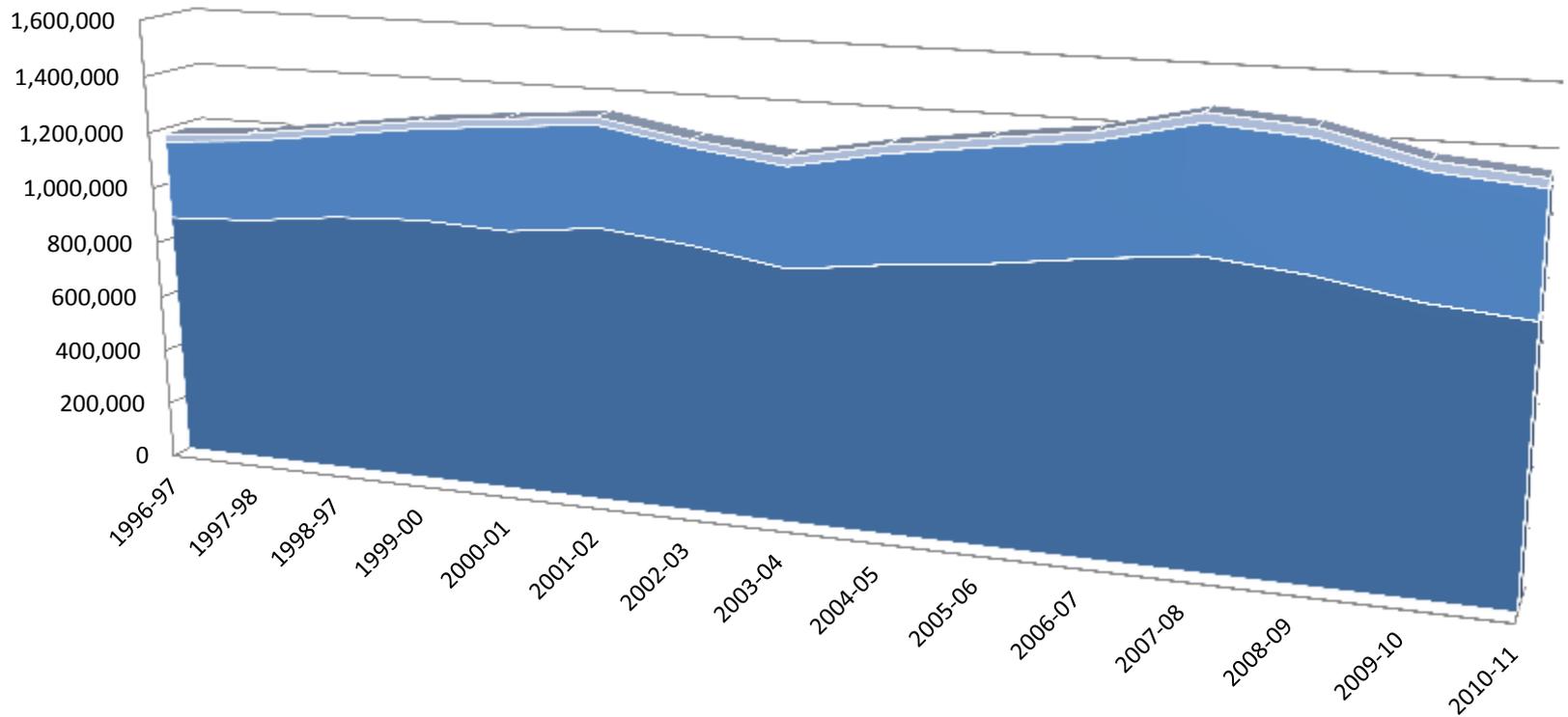


# California Transit Profile

- 220+ providers of California public transit
  - Cities, counties, special districts, JPAs
  - 6 urban light rail systems; 6 regional commuter/ heavy rail systems
- ~25,000 vehicles... Operating  
~550,000,000 miles of service

# California Transit Passenger Trips (1996 - 2011)

■ Motor Bus   ■ Rail, Street Car, and Trolley   ■ Demand Response and Other



# Overview

- Performance measurement
- Safety
- Asset management

# Performance Measurement



- State law
  - Farebox recovery ratio
  - Cost/ Hour eligibility criteria
  - Performance audits by RTPAs
  - Coordination direction to RTPAs
  - Short-range transit planning

# Performance Measurement



- Regional Plans/ TIPs
  - Long-range transportation planning

“... may require that the transportation planning agency, in reviewing claims, give due consideration to the level of the operator's **passenger fares** and charges, the **efficiency of the operator's operations** and operating policies and practices, the extent to which the operator is **meeting the transportation needs of the area served**, and the extent to which the operator is **making full use of other available revenues** and funds, including federal transportation grants.” (Pub. Utils. Code 99243)

“Each transportation planning agency shall annually identify, analyze, and **recommend potential productivity improvements** which could lower the operating costs of those operators...” (Pub. Utils. Code 99244)

Measure	Major Metro MPO			
	SCAG	MTC	SANDAG	SACOG
<b>Economic</b>				
Person-Delay	X			
Employment	X		X	
Gross Regional Product		X	X	
Payroll Impacts			X	
Benefit/Cost Ratio			X	
<b>Mobility</b>				
Ridership/Transit Trips	X			X
Passenger Miles	X		X	
Mode Share		X	X	X
Travel Time		X	X	
State of Good Repair		X		
# of Interregional Routes			X	
Travel Speeds			X	
Service Hours				X
<b>Accessibility</b>				
Travel Analysis Zones Served by Transit	X			
% of Income spent on Transportation & Housing		X		
Housing Displacement Potential		X		
Vehicle Miles Traveled per Populated Square Mile within 1,000 Feet of Heavily Used Roadway (pedestrian & bike safety)		X		
% of Trips within ½ Mile of Transit			X	
% of Homes within ½ Mile of Transit			X	
% of Work Trips Accessible within 30 Minutes			X	X
% of Non-Work Trips Accessible within 15 Minutes			X	
Access to Airport within 30 Minutes			X	
<b>Environmental Quality</b>				
Monetary Cost of Air Pollution	X			
Vehicle Miles Traveled	X	X	X	X
GHG Emissions	X	X	X	X
Reductions in Premature Deaths Caused by PM2.5		X		
PM10 Emissions		X		
CO <sub>2</sub> Emissions in Pounds			X	X

# Safety

- California Public Utilities Commission
  - Regulates charter party carriers...
  - And... urban light rail systems
- California Highway Patrol
  - Enforces driver training/ licensing/ operations, & vehicle safety
- Pools, SCRTTC, TCRP

# Asset Management

- State moving in this direction
- Stronger approach at regional/ agency/ advocate level

“... an asset is in a ‘state of good repair’ if it does not exceed its useful life and does not require rehabilitation.”

Update of California Unmet Funding Needs FY2011 to FY2020  
July 18, 2013



# Revenue vehicle fleet: By rail, bus and other categories

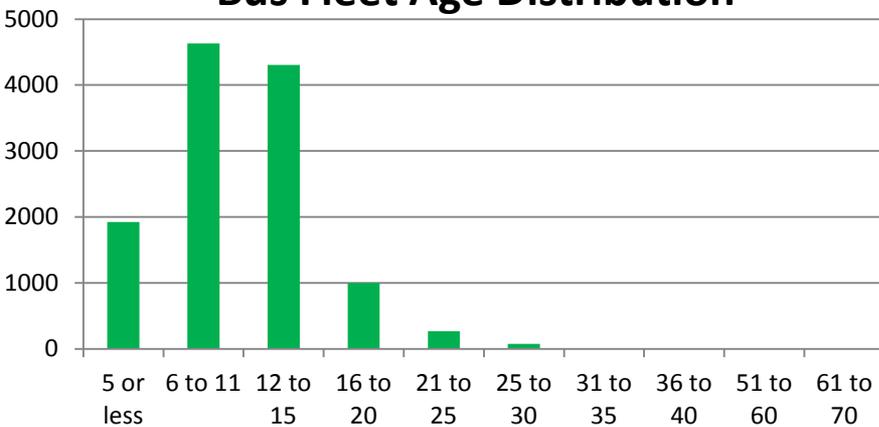
	Quantity	% of Fleet	Avg Age
Bus	12,213	50%	11.2
Other	10,068	42%	9.5
Rail	1,977	8%	31.7
<b>Total</b>	<b>24,258</b>	<b>100%</b>	<b>11.3</b>

BUS FLEET		
Age group	Quantity	% of Fleet
5 or less	1924	15.8%
6 to 11	4632	37.9%
12 to 15	4304	35.2%
16 to 20	998	8.2%
21 to 25	269	2.2%
25 to 30	74	0.6%
31 to 35	4	0.0%
36 to 40	4	0.0%
51 to 60	1	0.0%
61 to 70	3	0.0%

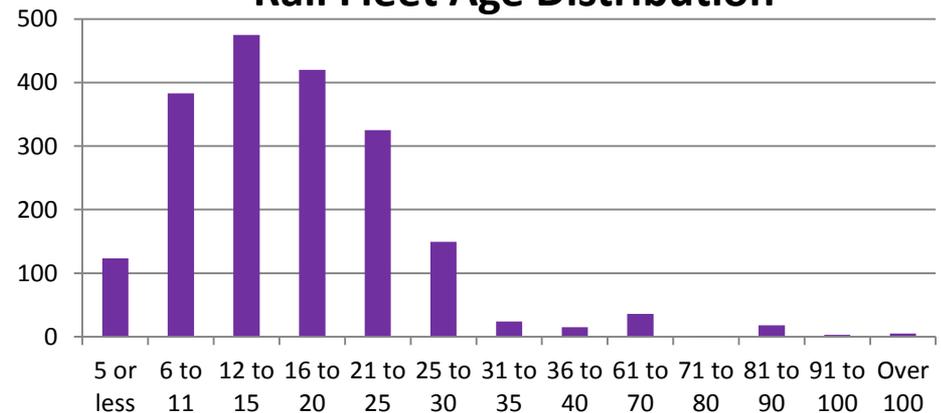
RAIL FLEET		
Age group	Quantity	% of Fleet
5 or less	123	8.4%
6 to 11	383	26.0%
12 to 15	475	32.3%
16 to 20	420	28.6%
21 to 25	325	22.1%
25 to 30	149	10.1%
31 to 35	24	1.6%
36 to 40	15	1.0%
61 to 70	36	2.4%
71 to 80	1	0.1%
81 to 90	18	1.2%
91 to 100	3	0.2%
Over 100	5	0.3%

California's bus fleet has 46% of vehicles at or beyond the 12 year replacement age recommended by FTA

**Bus Fleet Age Distribution**



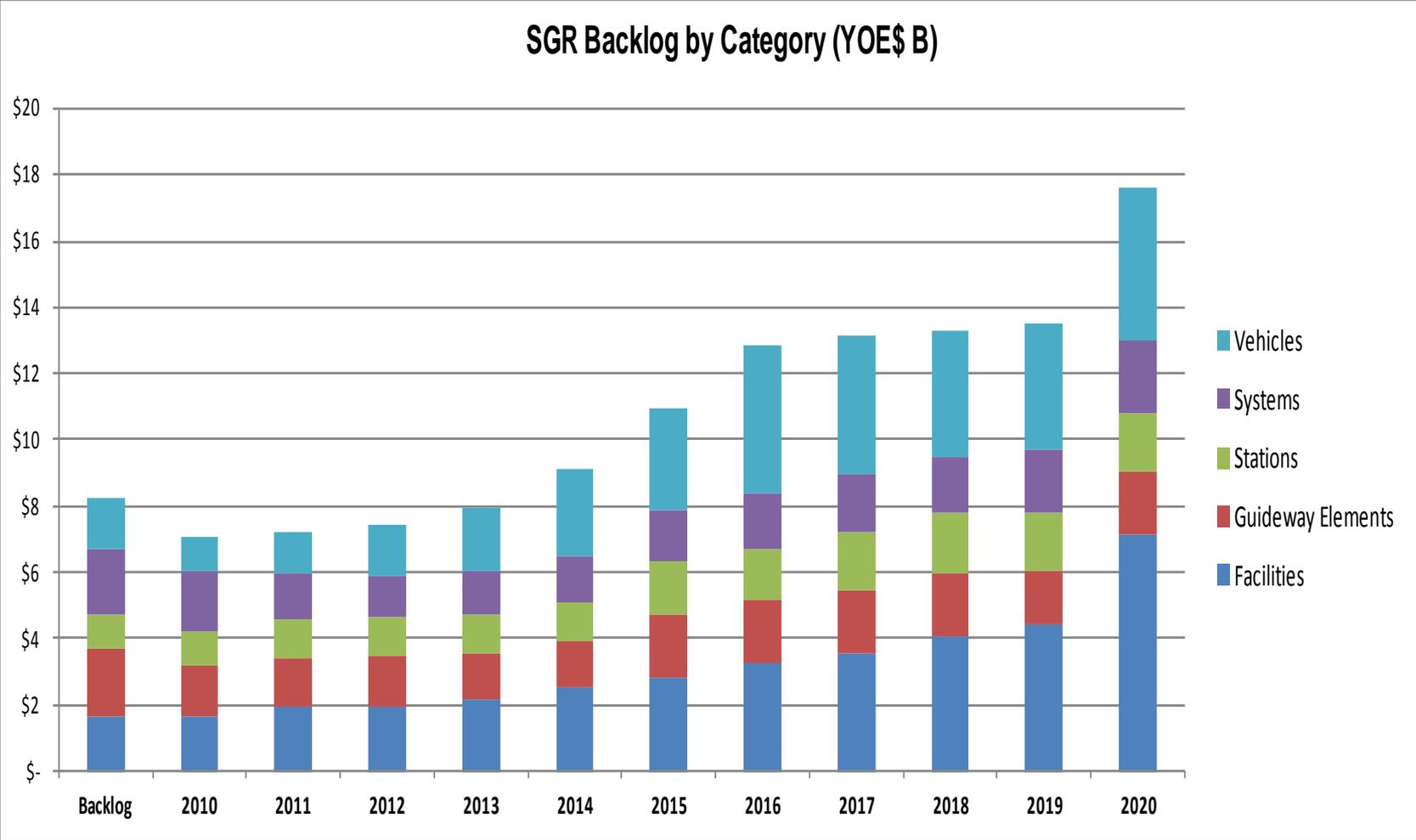
**Rail Fleet Age Distribution**



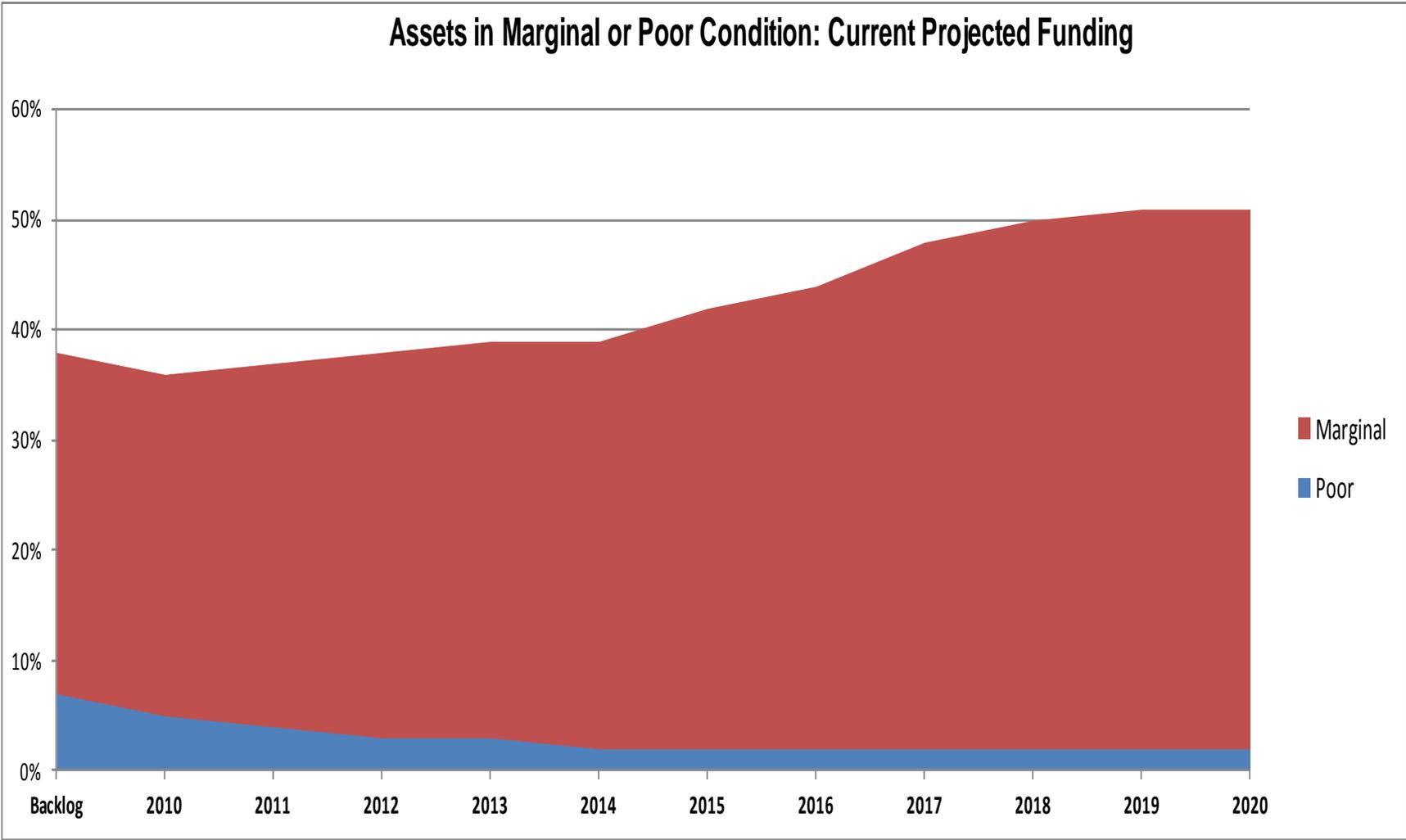
**Notes:**

- "Other" includes ferries, demand response, vanpool, and cable car

# Projected SGR Backlog with Current Capital Funding Forecast



# Condition of Transit Assets with Current Capital Funding Projections





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